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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,723	10/28/2003	Jamal Sarraf	PD-970227B	5541

7590 04/27/2007  
HUGHES ELECTRONICS CORPORATION  
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EXAMINER
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NGUYEN, TUAN HOANG

ART UNIT	PAPER NUMBER
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2618

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/27/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/695,723

Applicant(s)

SARRAF ET AL.

Examiner

Tuan H. Nguyen

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response To Arguments***

1. Applicant's arguments, see applicant's remarks, filed on 01/29/2007, with respect to the rejection(s) of claims 1-5 under 35 U.S.C § 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Rosen (US PAT. 4,831,619) and Acampora et al. (US PAT. 4,425,639 hereinafter, "Acampor").

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosen (US PAT. 4,831,619) in view of Acampora (US PAT. 4,425,639 hereinafter, "Acampor").

Consider claim 1, Rosen teaches a method for improving utilization of satellite capacity of a satellite system that uses multiple uplink and downlink spot beams (col. 2

Art Unit: 2618

lines 19-40), comprising: integrating an area-wide broadcast (fig. 9 zones 31, 33, 35, and 37) downlink beam to be used to support point-to-point transmissions (col. 4 lines 30-41).

Rosen does not explicitly show that downlink beam to be used to support point-to-point transmissions of one or more of the multiple spot beams whose transmission capacity has been exhausted.

In the same field of endeavor, Acampora teaches downlink beam to be used to support point-to-point transmissions of one or more of the multiple spot beams whose transmission capacity has been exhausted (col. 4 lines 21-59).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use, downlink beam to be used to support point-to-point transmissions of one or more of the multiple spot beams whose transmission capacity has been exhausted, as taught by Acampora, in order to provide the uplink spot-beams are frequency-channelized into a plurality of equal capacity channels and the downlink spot-beams each have their channels concentrated into a lesser number of higher bit-rate wider bandwidth transmission channel.

Consider claim 2, Rosen further teaches allocating a full primary spectrum of one polarization to uplink and downlink spot beams for point-to-point transmissions (col. 4 lines 58-67), and allocating a full primary spectrum of a polarization opposite to the one polarization to the area-wide broadcast downlink beam for broadcast transmissions (col.

Art Unit: 2618

4 lines 64-67).

Consider claim 3, Rosen further teaches assigning the full primary spectrum for broadcast transmissions in minimum-resolution broadcast bands (col. 6 line 66 through col. 7 line 2).

Consider claim 4, Rosen further teaches the minimum-resolution broadcast bands are assigned to any and all uplink spot beams in any combination as configured by a network control center (col. 13 lines 47-62).

Consider claim 5, Rosen further teaches each one of the multiple uplink and downlink spot beams can access the full primary spectrum for broadcast transmissions in increments of one minimum-resolution broadcast band and can transmit on at least (col. 15 lines 33-58).

### ***Conclusion***

4. Any response to this action should be mailed to:

Mail Stop\_\_\_\_\_ (Explanation, e.g., Amendment or After-final, etc.)

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Facsimile responses should be faxed to:

(571) 273-8300

Hand-delivered responses should be brought to:

Customer Service Window

Randolph Building

401 Dulany Street

Alexandria, VA 22313

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan H. Nguyen whose telephone number is (571)272-8329. The examiner can normally be reached on 8:00Am - 5:00Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Maung Nay A. can be reached on (571)272-7882882. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Art Unit: 2618

Information Consider the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tuan Nguyen  
Examiner  
Art Unit 2618

T.N.

  
**NAY MAUNG**  
**SUPERVISORY PATENT EXAMINER**